

# Nitrogen Balancing

## Available

- Nitrogen applied as fertilizers, teas, etc.
  - (lbs of N per acre)
- Nitrogen in soil
  - (lbs of N per acre)
- Nitrogen in irrigation water
  - (lbs of N per acre)

## Needed by crop

- Crop uptake
  - (lbs of N per acre)

# Nitrogen Balancing

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  - (lbs of N per acre)

|             |         |
|-------------|---------|
| Broccoli:   | 180-220 |
| Cauliflower | 180-220 |
| Celery      | 200-240 |
| Lettuce     | 80-120  |

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## Needed by crop

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|-------------|---------|
| Broccoli:   | 180-220 |
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| Celery      | 200-240 |
| Lettuce     | 80-120  |

- Some crops not studied
  - and we need to learn the values being used
- For all crops, we need to learn what values the grower is using so that we understand the problem

# Nitrogen Balancing

## Available

- Nitrogen applied as fertilizers, teas, etc.
  - (lbs of N per acre)
- Nitrogen in soil
  - (lbs of N per acre)
- Nitrogen in irrigation water
  - (CONCENTRATION)

## Needed by crop

- Crop uptake
  - (lbs of N per acre)

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## Available

- Nitrogen applied as fertilizers, teas, etc.
  - (lbs of N per acre)
- Nitrogen in soil
  - (lbs of N per acre)
- Nitrogen in irrigation water
  - (load in lbs of N per acre)

## Needed by crop

- Crop uptake
  - (lbs of N per acre)

# SUPPORT

- Eliminate toxic discharges of agricultural pesticides to surface waters and groundwater
  - February 2010 language focusing on TOXICITY
- Reduce nutrient discharges to surface waters to meet nutrient standards
  - Meet nutrient balancing ratios for high risk Tier 3
- Reduce nutrient discharges to groundwater to meet groundwater standards
  - Meet nutrient balancing ratios for high risk Tier 3
- Minimize sediment discharges from agriculture lands
  - Control sediment within 3 years (February 2010)
- Protect aquatic habitat (riparian areas and wetlands) and their buffer zones
  - 100, 75, or 50-foot stream buffers to protect water quality

# SUPPORT

- (p 26) Addition of “improved” to 87.5 .
- (p 33) Nitrate level is projected to be within 50% of MCL
  - Caveat that we still believe all drinking water wells should be tested (support August 20 draft).
- (pgs 47-49 and various) Total nitrogen in the soil
- (pgs 58-62) Inclusion of Nitrogen parameters in Annual Compliance Form
  - Caveat that LOAD of N in irrigation water
  - Caveat that Crop Uptake should also be included

# OPPOSE

- (p 14) Language biasing RWQCB towards third party programs
- (p26) Oppose adding provision 33 to 87.5 .
- (p34) Oppose deletion of language “include two initial sampling rounds(one Spring, one Fall)
- (pg 42) “Where water is reapplied as irrigation water, Dischargers shall document reuse in the Farm Plan (Annual Compliance Form)
- Oppose any modifiers to “Cause and contribute” language





09.15.2009